41. The Keeping and Breeding of Tasmanian Devils (Sarcophilus harrisi). By Mrs. MARY G. ROBERTS, C.M.Z.S., M.R.A.O.U.

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(Text-figure 1.)

PART I.

Until I was asked by Mr. A. S. Le Souëf, Director of the Zoological Gardens, Moore Park, New South Wales, early in 1910 to obtain, if possible, Tasmanian Tigers (Thylacinus cynocephalus) and Devils (Sarcophilus harrisi) for the London Zoological Society, I had never thought of keeping either of these animals in my collection; in fact, they were quite unknown to me except as museum specimens, although I had frequently visited remote parts of our island. I have vivid recollections, however, of how, when a young child at boarding-school in the late forties, some of the girls from Bothwell, near the Lake District, used to give graphic and terrifying accounts of the Tasmanian Devils with their double row of teeth. This belief is not yet exploded, as it was impressed upon me lately with the utmost confidence by a country visitor that such was the case; he not only believed, but said "he had seen." The teeth have been described to me by a scientist as truncated.

Shortly after hearing from Mr. Le Souëf, by means of advertising, writing, etc. I obtained three for the London Society, and having then become thoroughly interested I determined to keep some myself. Since that time a large number have passed through my hands, and more than once I have been "a woman possessed of seven devils."

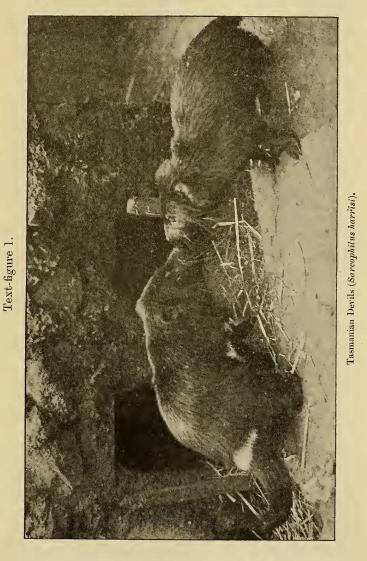
In April 1911 I received a family (a mother and four young), and again in September of the same year a similar lot arrived. The former were very young, and I had the opportunity of watching their growth almost from their first appearance when partly protruding from the pouch. When sending them, the trapper wrote that "the mother was so quiet, I need not be afraid to pick her up in my arms." The little ones hung from her pouch (heads hidden in it), and she lay still and motionless as if afraid of hurting them by moving, and allowed me to stroke her head with my hand. However timid they may be, and undoubtedly they are extremely so, growling and showing their teeth when frightened, they always evince this gentleness and stillness when nursing little ones.

The skin of the young, on arrival, had the appearance of a slate-coloured kid glove, the tail darker towards the tip. The hair could be seen growing black and velvety from the head downwards, the latter being hidden in the pouch for some days. and it was interesting to note the progress of the growth of the hair from day to day. The shoulders were covered while the hind-quarters were almost, or quite, bare, although a faint streak of white was discernible where the white markings were to come later on. At this early stage, should the mother get up to move about, which she rarely does in the daytime, the young somehow scramble into the pouch again.

This family went later to the London Society, but the second, which came on the 16th of September, I kept for my own pleasure, with the exception of the mother; as she had lost a foot when being trapped, I thought it best to have her destroyed later on. Unfortunately, when they were about half grown one escaped into the garden, and the next morning her mutilated remains were found—she had fallen a victim to our two fox-terriers. The three survivors have been ever since an unfailing source of interest and amusement to my family, to visitors, and myself. When a bone or piece of meat was thrown to them a tug-of-war was always the result, and sometimes a chase into one door and out of the other of the little cave. At other times, while one has been holding on to a bone held in my hand, I have lifted it completely off the ground, while another would cling on round the waist and try to pull it down.

Many visitors from the Commonwealth have heard such exaggerated accounts of the ferocity and ugliness of the Tasmanian Devil (others, again, have believed it to be a myth), that they sometimes express surprise when they see them so lively, sprightly and excited, running out to my call; they then remark, "the devil is not so black as he is painted."

Two of these Devils were latterly kept together as a pair, and for the purposes of this article I will call them Billy and Truganini, after the last two survivors of our lost Tasmanian race. These showed no disposition to breed until April 1913, and my observation of them and of many others that 1 have had in my keeping is, that the disinclination to take up maternal duties is always on the part of the female. I then noticed suddenly a decided changethat Billy would not allow her to come out of their little den; if she did venture when called to be fed, or at other times, he immediately attacked her and would drag her back by the ear, or any other part, but although otherwise cruel, he would carry food in to her. When I called her, it was pitiable to hear her whining; but it was of no avail, for Billy was a relentless tyrant and kept her in strict seclusion for quite ten or twelve days; then early in May he allowed her to be free once more. From thence onward, although they were sometimes peaceable and affectionate, the balance of power was completely on Truganini's side; she constantly resented his approach by biting and snarling at him: it seemed as if coming events cast their shadows before, and she instinctively felt that he would do the young some injury. From now her pouch was anxiously scanned day by day, but it was some time before I could be sure that it was gradually enlarging. I had been advised by Dr. Hornaday, of the New York Zoological Park, that if ever the Tigers or Devils were likely to have young, to remove the male, and as soon as I was certain, I had Billy taken away



and placed with the other member of the family. This made Truganini most unhappy, as he was near enough for her to hear him, besides which, the two males fought; so, being cautioned by my family that perhaps my interference might cause a disaster, I yielded and replaced him, doing so with many misgivings. Matters went on much the same until late in September, when to my delight a tail, and at other times part of a small body, could be seen sticking out of the pouch, more especially when the mother sat up to wash her face, or rolled upon her back; unlike domestic cats, the devils use both paws for washing, placing them together and thus making a cup-like depression which, when thoroughly licked, is rubbed well over the face. Everything looked very promising on the Sunday before Michaelmas Day, when I noticed Truganini carrying large bunches of straw about in her mouth, evidently seeking for a retired place to make a bed, and we had already placed some fern logs in a corner of their yard. As Billy would follow her about and interfere, I had a box put down with a hole cut in the side that she might hide under; but it was of no use, as where she went he would also go, and a scrimmage was the inevitable result. Early next morning, with many misgivings I left home for ten days, only to find on my return that her pouch was empty and that the young had disappeared, and as no remains whatever had been found, I could only conclude that they had been eaten by Billy.

Thus ended all my hopes and anticipations for 1913. I have not so far related an incident that took place just before the breeding-season. Being hopeful that Truganini might have young in her pouch, and my assistant being as usual very busy, Professor T. T. Flynn, of the Tasmanian University, who is always interested in our marsupials, kindly offered to examine her pouch. As soon as an attempt was made to catch her, Billy grasped the position of affairs and fought to defend her with all his might, even getting behind her in the little cave, putting a paw on each shoulder and holding her tightly, lest she might get into what appeared to him to be the danger zone. By dint of perseverance and a little strategy he was outwitted at last, but our hopes were doomed to disappointment.

Truganini has now passed through another period of retirement, and I am hoping to record shortly a greater measure of success for 1914.

I cannot close this article without a few words in defence of the Tasmanian Devil, as I am sure that it is more or less "misunderstood," and the article with photograph published in the 'Royal Magazine ' for October 1913 under the name of L. R. Brightwell, F.Z.S., is, I consider, greatly exaggerated both as regards their appearance and character, viz., "They are well named, for they tear everything, even sheep, to pieces if they get the chance."

On several occasions when one of mine has escaped, the only mischief done has been the destruction of a fowl or a duck or two. It would have been just as easy for a wallaby to have been killed if they had had the inclination, about which our fox-terriers would not have hesitated for a minute if a chance had occurred. When in transit to London last year one escaped, and I have been told by the chief officer of the vessel that "the passengers were much alarmed as there were children on board, and someone went about with a revolver." Later I came across the butcher who was in charge at the time, and he appeared to have been rather amused than otherwise, and told me the missing one was discovered at last quietly sleeping under the berth of one of the sailors ! I don't wonder, with the reputation that the devils have, that the passengers were alarmed.

PART II.

Having written so much in the first part about the keeping and breeding of Tasmanian Devils, I fear I have not many fresh facts to relate for 1914. The season arrived a month earlier, and Billy released his little mate from retirement on the 20th of March. She was just as disagreeable to him afterwards as she had been on the former occasion, biting and snarling whenever he approached her, and on the 8th of July I removed him from the enclosure. There was nothing of importance to note until the 30th of the month, when a little tail was seen sticking out of the pouch, and on the following day a foot and thigh were visible.

I will now give my observations on certain days following. August 3rd—Little ones partly hanging out of pouch. I must not forget to state that about this time, or a little later, Truga was observed carrying bundles of straw about in her mouth, with which to make her bed, and finally took them behind the fern logs that we had thrown down, but unfortunately I omitted to note the exact date. 4th, 5th, and 6th-Sometimes saw three tails only. 7th—A little one lying on its back, feet in air and head in pouch. On the 9th, for the first time, the man saw one standing alone on a fern log, when it immediately scrambled down to the mother. 10th, 11th, and 12th-Mother frequently seen, sometimes with only three tails observable, at other times little ones exposed, bodies resting on the ground with the heads hidden. From these observations, I may point out how difficult it is to know exactly when the young are able to leave the pouch, it being coincident, I think, with the making of the bed by the mother. On the morning of the 13th Truga ran out to meet me, jumping over fern logs, and left a little one whining behind, having the tails of the other two and a foot showing outside the pouch; she went back at once to the young one, when it immediately got on her back. 14th-Mother came out with two dangling from her, leaving a little one behind crying; she at once ran back and returned with all three in her pouch. Next day when she came forward to meet me, only two tails and a foot could be seen. 16th—All three were hanging out, and instead of jumping over ferns as usual, she had scraped away the straw and earth and came out from an opening underneath them. By this time they were getting quite covered with hair, white markings distinct, and sometimes when disturbed they would make a faint attempt at

a bark. From the 19th to the 23rd inclusive they were occasionally seen all together out, yet on the three days following I saw her about with two dangling from her. On the evening of the 27th, upon her running out to meet me, I threw her some meat, which she carried in to the young, afterwards returning for more for them, and eventually lay down contentedly in front of 29th—All three playing like puppies, biting each the opening. other and pulling one another about by the ears. 30th-Whole family hanging from the mother as she ran out, and one hardly knows which to admire most, her patience and endurance, or the hardihood of the young in holding on and submitting to so much knocking about. The whole process seems very casual and most remarkable, when compared with the breeding and rearing of other marsupials. With the Kangaroo and allied types the head is seen first, looking out of the pouch, and in the early stages is quite bare. Sept. 1st-Young ones playing in their little corner. 9th-Not been seen this month in their mother's pouch. 30th-Coming out all alone for pieces of meat and evidently able to look after themselves. At the beginning of the New Year I removed them to other quarters and replaced Billy, much to the annoyance of Truga; probably she resented the loss of her little ones, and showed her anger by biting him severely about the body and leaving various tooth-marks.

From observations made during the two seasons, I have come to the conclusion that about four months and a half elapse between the breeding-season and the time the young are able to leave the pouch.

The baby devils had the sense of smell very strongly developed; immediately I approached, their nostrils would begin to work and a vigorous sniffing would go on. They were also expert climbers, and although I had some specially constructed yards made, they would get up the wire-netting and walk along the top rail quite easily; at other times they would climb a pear-tree growing in their enclosure and sit in the branches like cats.

GENERAL REMARKS.

I have always found devils rather fond of a bath; quite recently, going down to their yard after an illness and finding only a drinking vessel, I ordered a larger one to be put in, and they showed their pleasure by going in at once, sometimes two at a time. I have occasionally poured water from a can over them, when they would run to and fro under it with much enjoyment.

Their sight in daylight is rather defective; they seem to pick up their food more readily by smelling than by seeing, and I think they can see objects better at a distance.

At the present time I have six running together, my own three and three that I bought when in their mother's pouch. All are tame, frolicsome, and lively. I can go in and have a bit of fun with them, and when I am outside their enclosure they frequently climb the wire-netting to the height of nearly six feet, and get their little black faces close to mine with evident delight. We have tried more than once to get them photographed, but it is impossible to keep them quiet, they are on for a scamper all the time. Recently an adult escaped, and it was discovered by a passing school-boy sitting on a high fence bordering the street, under the shade of some elm-trees, many people passing on the foot-path without observing it. They are, however, always very timid when coming down.

They are fond of the sun, and look well when basking in it, the rays shining through make their ears appear a bright red, fore feet parallel with the head, hind-quarters quite flat on the ground and turned out at right angles, somewhat as a frog.

My sympathy with my little black "brothers and sisters" is intense, probably evoked by having suffered much mentally owing to the gross cruelties which have come under my notice, the result of capturing them in traps. Frequently three or four have been sent to me in a crate, only to find later on one with a foot shot off or a broken leg. In a consignment received some time ago, a dead one was found; it bore unmistakable signs of a snare previously, round the neck, one foot was gone (an old injury), and finally a recently smashed leg much swollen, the cause of death. I communicated with the S. P. C. A., and since then have had none from that district.

I have derived much pleasure from studying the habits and disposition of the Tasmanian Devils, and have found that they respond to kindness, and certainly show affection and pleasure when I approach them. I have been led to believe that no case of their breeding in captivity has been recorded, and certainly not in Tasmania.

Others who do not know or understand them may think of them as they like, but I, who love them, and have had considerable experience in keeping most of our marsupials, from the Thylacine down to the Opossum Mouse (*Dromica nana*), will always regard them as first favourites, my little black playmates.